

IN THE CLAIMS:

Please amend claims 1- 18 as follows:

1. (Currently Amended) ~~Sighting~~ A sighting device for an examination by *in vivo* tomography of the eye of a subject, comprising at least one moving target ~~(CA, CB)~~ having a programmable shape or trajectory, said target being displayed on viewing means and visible by at least one eye of said subject during the examination period.

2. (Currently Amended) ~~Device~~ The device according to claim 1, ~~characterized in that it also comprises~~ further including means to move for moving the target(s) so as to alternate fixation intervals on a given position with intervals termed rest on one or more other positions.

3. (Currently Amended) ~~Device~~ The device according to claim 2, ~~characterized in that it also comprises~~ further including means of for adjusting the duration of the fixation intervals.

4. (Currently Amended) ~~Device~~ The device according to claim 3, ~~characterized in that it also comprises~~ further including means of for adjusting the diversity of the rest positions.

5. (Currently Amended) ~~Device~~ The device according to ~~one of~~ claims 3 or 4, ~~characterized in that it also comprises~~ claim 3, further including means of for adjusting the duration of the rest positions.

6. (Currently Amended) ~~Device~~ The device according to ~~one of~~ claims 3 to 5, ~~characterized in that it also comprises~~ claim 3, further including means of for controlling a continuous movement of a moving target.

7. (Currently Amended) ~~Sighting~~ A sighting method for an examination by *in vivo* tomography of a subject's eye, implemented in a device according to ~~one of the preceding claims~~ claim 1, comprising a display on the viewing means, during the examination period, of at least one moving target (~~CA, CB~~) having a programmable shape or a programmable trajectory and visible by at least one eye of said subject.

8. (Currently Amended) ~~Method~~ The method according to claim 7, ~~characterized in that it also comprises~~ further including a movement of the target(s) so as to alternate fixation intervals on a given position with intervals termed rest on one or more other positions.

9. (Currently Amended) ~~Method~~ The method according to claim 8, ~~characterized in that it also comprises~~ further including an adjustment of the duration of the fixation intervals.

10. (Currently Amended) ~~Method~~ The method according to ~~one of claims 8 or 9~~, ~~characterized in that it also comprises~~ claim 8, further including an adjustment of the diversity of the rest positions.

11. (Currently Amended) ~~Method~~ The method according to claim 7, ~~characterized in that it also comprises~~ further including a control of a continuous movement of a moving target.

12. (Currently Amended) ~~Method~~ The method according to ~~one of claims 1 to 11~~, ~~characterized in that it also comprises~~ claim 1, further including a tracking of the movements of the eye to be examined.

13. (Currently Amended) ~~Method~~ The method according to ~~one of claims 1 to 12~~, ~~characterized in that~~ claim 1, wherein the tracking of the movements of the eye to be examined is carried out by imaging using a non-visible spectrum.

14. (Currently Amended) ~~System~~ A system for examining the eye by *in vivo* tomography, comprising a tomography device including:

- a Michelson interferometer, producing a full field optical coherence tomography OCT setup,

- adaptive optical means, arranged between the interferometer and an eye to be examined, producing a correction of the wavefronts originating from the eye as well as those reaching the eye, and

- means ~~offor~~ for detection, arranged downstream of the interferometer, capable of carrying out, without synchronous modulation or detection, the interferometric measurement according to the OCT principle, and

~~eharakterized in that it also comprises~~ a sighting device comprising at least one moving target, having a programmable shape or a programmable trajectory, said target being displayed on viewing means and visible from at least one of the eyes of said patient during the examination period.

15. (Currently Amended) ~~System~~ The system according to claim 14, ~~eharakterised in that~~ wherein the sighting device and the tomography device collaborate by using an *a priori* knowledge of the trajectory or of the shape of the target to readjust the images of the eye as a function of said trajectory.

16. (Currently Amended) ~~System~~ The system according to ~~one of~~ claims 14 or 15, ~~eharakterized in that it comprises~~ claim 14, further including means (IRIS) ~~offor~~ for tracking movements of the eye to be examined (OEX), collaborating with the tomography device.

17. (Currently Amended) ~~System~~ The system according to ~~one of~~ claims 14 to 16, ~~eharakterized in that it comprises~~ claim 14, further including means to ~~enable~~ for enabling the image of the target to reach both eyes (OV1, OEX) of the subject to be examined.

18. (Currently Amended) ~~System~~ They system according to ~~one of~~  
~~claims 14 to 17, characterized in that it comprises claim 14, further including means to~~  
~~enable~~ for enabling the image of the target to reach the unexamined eye of the target  
selectively from one side (~~OV1~~) or from the other side (~~OV2~~) of the examined eye (~~OEX~~).